

35 U.S.C. §102 objections

The Examiner's §102(b) and (e) rejections of claim 1, 2, 6 and 11 for being anticipated by the Kurita U.S. Patent No. 5,175,538, the Beery U.S. Patent No. 5,045,947, and the Beery U.S. Patent No. 5,068,734, as this rejection may be attempted to be applied to claims 1, 2, 6 and 11, is respectfully traversed.

In support of this traverse, applicants make the following arguments:

Kurita discloses a learning remote control capable of receiving the transmission of a second remote control in order to learn the signal being transmitted by the second remote. In this way the learning remote control learns all of the signals necessary to mimic the function of the second remote. The Kurita learning remote control contains the additional feature of having pre-stored in ROM, a default set of transmission signals. In the event that a particular key of the Kurita learning remote control is not taught a signal, when that particular key is operated, the Kurita learning remote control will transmit the pre-stored default signal in the absence of a learned signal.

In order for the user to teach the Kurita learning remote control a signal, the user must have access to a remote control capable of transmitting the signal to be learned.

Furthermore, due to the wide range of transmission protocols and signals used by the various makers of remotely operated electronic equipment, it is highly unlikely that any particular pre-stored default set of signals will appropriately correspond to an appreciable number of remotely operated electronic devices.

Applicants' claimed apparatus and methods differs from Kurita in several ways. A first difference can be seen in that applicants' remote control is not a learning remote control. Applicants' remote control does not require a second remote control capable of transmitting the desired signal from which to learn the appropriate signal.

While it is true that the Kurita remote control user, with respect to a particular key, could teach the learning remote whatever signal the user could generate from another signal

source, this would be accomplished not by reassigning the appropriate key signal but by learning over the previously learned signal. The previously learned signal would be replaced or forgotten.

Additional differences can be seen in that Kurita does not provide for key reassignment nor does it contain applicants' claimed features of a Key Reassignment table, or program instructions in binary form stored in said memory means for enabling one to assign a different command function to a key on the keypad upon the inputting of a predetermined keystroke sequence on said keypad. These claimed differences, in part, allow applicants' remote control to reassign key values without requiring the presence of a second remote control.

Kurita fails to teach or disclose applicants' remote control and/or method of reassigning a function to a particular key on a keypad.

Both Beery patents disclose a remote control/television tuner system capable of remapping channel numbers so that the user can reference the channels based on the user's choice of channel numbers. The tuner would translate the user chosen channel numbers to the channel numbers that correspond to channel designations defined by the incoming source, like cable or over-the-air transmission.

Beery is limited in that it only translates channel numbers, and fails to teach or disclose anything with respect to function keys like power, volume up, volume down, etc.. While Beery provides for a channel translation between the user's chosen channel designation and the actual tuned channel, Beery does not alter the assigned function of any of the keys on the remote control. When the user actuates the number one button on the Beery remote control the user still gets a number one. It is not until the channel is chosen that the Beery remote control/tuner system translates the user chosen channel to the appropriate corresponding tuned channel.

Applicants' remote control actually allows the functionality of a key to be altered, numbers as well as function keys. For example, contrary to the Beery remote control/tuner system, in applicants' remote control the function of transmitting the number three could be mapped to

the one key, such that now when the one key is pressed the remote control behaves as if the three key is pressed. Furthermore, any function could be mapped to the any key including the one key, not just an alternative channel number.

The remote control/television tuner system disclosed in both Beery patents are directed to something very different than the concept of reassigning key functionality.

Applicants submit, that for the reasons stated above, neither the Kurita reference nor either Beery reference anticipates applicants' claimed apparatus and methods.

#### 35 U.S.C. §103 objections

The Examiner's §103 rejections of claims 3-5 and 7-10, as being obvious with respect to Kurita and Beery in light of Osborne et al. U.S. Patent No. 4,291,385, as these rejections may be attempted to be applied to claims 3-5 and 7-10, are respectfully traversed.

In support of this traverse, applicants make the following arguments:

The Examiner suggests that Osborne teaches key assignment such as claimed by applicants. However, at col. 2 line 64 to column 6 line 42 Osborne teaches how a program could be stored for execution on a calculator. The program can be associated with one of the keys labeled A through E.

Osborne also teaches the limited use of compression, where two discrete key code functions can be represented in memory with one of the unused key codes.

However, this is very different than reassigning key functionality as disclosed with respect to applicants' remote control. Not only is a calculator a very different type of device than that of a remote control, a calculator and a remote control perform very different functions.

The differences are highlighted by the Examiner's portrayal of the keyboards as "programming keypads of limited size" page 4, line 8 of the Examiner's Action. While a calculator's keypad may be often thought of as a programming keypad. A remote control's keypad is not thought of as a programming keypad. This is because inherent in the use of a calculator is the activation of a string of keys to get a desired result. While a user operating a remote control

activates very few keys, typically only one key, to control the target device.

Because of their differences in nature, applicant's asserts that a reference based on a calculator would not be applicable with respect to a remote control.

Additionally even if for the sake of argument Osborne were deemed to be analogous art, Osborne would still fail to make obvious applicants' remote control.

A user of the calculator in Osborne can only associate a user program with one of the pre-designated keys A through E. The function of all other keys are fixed in place. This is much different than being able to reassign key functionality to any other key, including reassigning the functionality of a key to remotely control a device different than the one currently selected to be controlled, as may be desirable if the audio of the television is being played through the stereo for example.

Similarly because of one of the applications of applicants' remote control in being able to be configured to control one of many different devices, it is unknown ahead of time which predefined function keys may not be available in the currently controlled device and would be a prime candidate for reassignment. The ability to reassign the functionality of any and all keys is a very useful feature not disclosed in any of the cited references.

Applicant submits that the claimed apparatus and method are distinct and nonobvious in view of the cited references for the reasons stated above. The present amendment does not add any new matter to the application, and applicant submits that the claims are in condition for allowance. Accordingly, entry of the present amendment and reconsideration of the application is earnestly requested.

Respectfully submitted,



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